





ENTERED

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/051,618A

DATE: 09/11/2002 TIME: 10:31:46

5

Input Set : A:\seq listing.txt

Output Set: N:\CRF4\09112002\J051618A.raw

```
3 <110> APPLICANT: Herath, Herath Mudiyanselage
             Athula Chandrasiri
             Parekh, Rajesh Bhikhu
             Patel, Thakorhhai Parshotambhai
             Rohlff, Christian
     9 <120> TITLE OF INVENTION: DPI-6, A PUTATIVE THERAPEUTIC TARGET AND BIOMARKER IN
NEUROPSYCHIATRIC AND
           · NEUROLOGICAL DISORDERS
     10
     12 <130> FILE REFERENCE: 2543-1-008/PCT US
     14 <140> CURRENT APPLICATION NUMBER: US 10/051,618A
     15 <141> CURRENT FILING DATE: 2001-10-24
     17 <150> PRIOR APPLICATION NUMBER: GB 0004412.3
     18 <151> PRIOR FILING DATE: 2000-02-24
     20 <150> PRIOR APPLICATION NUMBER: GB 0004415.6
     21 <151> PRIOR FILING DATE: 2000-02-24
     23 <150> PRIOR APPLICATION NUMBER: GB 0006285.2
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     27 <151> PRIOR FILING DATE: 2000-11-24
     29 <150> PRIOR APPLICATION NUMBER: US 09/724,391
     30 <151> PRIOR FILING DATE: 2000-11-28
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     33 <151> PRIOR FILING DATE: 2000-11-28
     35 <150> PRIOR APPLICATION NUMBER: GB 0030050.9
     36 <151> PRIOR FILING DATE: 2000-12-08
     38 <150> PRIOR APPLICATION NUMBER: US 60/254,830
     39 <151> PRIOR FILING DATE: 2000-12-12
     41 <160> NUMBER OF SEQ ID NOS: 5
     43 <170> SOFTWARE: PatentIn version 3.0
     45 <210> SEQ ID NO: 1
     46 <211> LENGTH: 2479
     47 <212> TYPE: DNA
     48 <213> ORGANISM: Homo sapiens
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     50 <221> NAME/KEY: misc_feature
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     52 <223> OTHER INFORMATION: n=g or a or t or c at position 1146
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     55 <221> NAME/KEY: CDS
     56 <222> LOCATION: (38)..(1090)
     58 <400> SEQUENCE: 1
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     59 ggcacgaggg ggcggcgct gcgggcgcag agcggag atg cag cgg ctt ggg gcc
                                                 Met Gln Arg Leu Gly Ala
     60
```

61

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Output Set: N:\CRF4\09112002\J051618A.raw

63	acc	ctg	ctg	tgc	ctg	ctg	ctg	gcg	gcg	gcg	gtc	CCC	acg	gcc	ccc	gcg	103
64	Thr	Leu	Leu	Cys	Leu	Leu	Leu	Ala	Ala	Ala	Val	Pro	Thr	Ala	Pro	Ala	
65				10					15					20			
67	ccc	gct	ccg	acg	gcg	acc	tcg	gct	cca	gtc	aag	CCC	ggc	ccg	gct	ctc	151
68	Pro	Ala	${\tt Pro}$	Thr	Ala	Thr	Ser	Ala	Pro	Val	Lys	Pro	Gly	Pro	Ala	Leu	
69			25					30					35				
71	agc	tac	ccg	cag	gag	gag	gcc	acc	ctc	aat	gag	atg	ttc	cgc	gag	gtt	199
72	Ser	Tyr	Pro	Gln	Glu	Glu	Ala	Thr	Leu	Asn	Glu	Met	Phe	Arg	Glu	Val	
73		40					45					50					
75	gag	gaa	ctg	atg	gag	gac	acg	cag	cac	aaa	ttg	cgc	agc	gcg	gtg	gaa	247
76	Glu	Glu	Leu	Met	Glu	Asp	Thr	Gln	His	Lys	Leu	Arg	Ser	Ala	Val	Glu	
77	55					60				_	65	_				70	
79	qaq	atq	gag	gca	gaa	qaa	gct	gct	gct	aaa	qca	tca	tca	gaa	gtg	aac	295
		-		_	-	_	_	-	-		_		Ser	-			
81					75					80					85		
	cta	qca	aac	tta	cct	ccc	agc	tat	cac	aat	qaq	acc	aac	aca	gac	acq	343
	_	_					_						Asn		_	_	
85				90				-1-	95					100			
	ааσ	att	σσα		aat	acc	atc	cat	_	cac	сαа	σаа	att		ааσ	ata	391
													Ile				55 <u>1</u>
89	1115	• • •	105					110	,		9	014	115		2,5		
	acc	aac		саσ	act	ααа	caa		atc	+++	tca	σασ	aca	att	atc	aca	439
				_				_	-				Thr				100
93	1111	120	ASII	GIII	1111	OLY	125	ricc	VUL	1110	DCI	130	1111	VUL	110	1111	
	tat		aaa	a a c	a a a	ma a		202	200	age	cac	_	tgc	ato	ato	π2 C	487
			-	_	_	_				_			Cys				407
97		Val	GIY	vsh		140	GIY	ALG	пта	Ser	145	GIU	Суз	116	TIC	150	
		αa.α	tat	ααα			ata	tac	tac	car		acc	agc	tta	car		535
		-	_			-	_		_	_		_	age Ser		_		333
101	GIU	. vol	Cys	, сту	155		Met	. тут	Суз	160		. AIC	, per	FILE	165	-	
	200	+~							. 200			+ 44	acc				583
		-	_		_			_		_		_	Thr		_	_	303
105	1111	Суг	, 611	170	_	ALG	GLY	GII	175		. Deu	Суз	, 1111	180	_	261	
	~~~	+~~	. + ~+			020		+ ~+					. + ~ ~			ata	631
																atg	031
	GIU	Суз	185	_	ASP	GII	пеп	190		TIP	, сту	пт	Cys 195		ьуѕ	Met	
109																	670
													cag				679
	Ата		-	GIY	ser	ASI	_		. ite	Cys	Asp		ı Gln	Arg	Asp	Cys	
113		200					205					210					707
													, ctg				727
			) GTZ	, Leu	Cys			Pne	GIn	Arg	_		ı Leu	Pne	Pro		
	215					220					225					230	
													gac				775
	Cys	Thr	Pro	Leu			Glu	Gly	Glu		_	His	asp.	Pro			
121					235					240					245		
													gat				823
	Arg	Leu	Let			Ile	Thr	Trp			Glu	Pro	) Asp			Leu	
125				250					255					260			
127	gac	cga	tgo	cct	. tgt	gcc	agt	ggc	ctc	ctc	tgc	cag	ccc	cac	ago	cac	871





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Input Set : A:\seq listing.txt

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	128	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly	Leu	Leu	Cys	Gln	Pro	His	Ser	His	
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	131	agc	ctg	gtg	tat	gtg	tgc	aag	ccg	acc	ttc	gtg	ggg	agc	cgt	gac	caa	919
	132	Ser	Leu	Val	Tyr	Val	Cys	Lys	Pro	Thr	Phe	Val	Gly	Ser	Arg	Asp	Gln	
	133		280		-		-	285					290		-	_		
		αat	aaa	σασ	atc	cta	cta	ccc	aga	σασ	atc	ccc	gat	σασ	tat	αaa	at.t.	967
		_				_	_		Arg		-		-			_	-	,
	137	-	GLY	Olu	110	Deu	300	110	**** 9	OIU	,	305		O.L.	-1-	014	310	
			200	++~	2+4	a > a		a+a	cgc	020	a a a		man.	a=a	ata	a a a		1015
																		1013
		GIY	ser	Pne	мет		GIU	vaı	Arg	GTII		ьеи	GIU	ASP	Leu		Arg	
	141					315					320					325		
									ctg									1063
	144	Ser	Leu	Thr	Glu	Glu	Met	Ala	Leu	Gly	Glu	Pro	Ala	Ala	Ala	Ala	Ala	
	145				330					335					340			
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	148	Ala	Leu	Leu	Gly	Gly	Glu	Glu	Ile									
	149			345	_	_			350									
W>	151	agat	tatac	caa 1	tagaa	aatao	gc ta	aatti	tattt	. ccc	cano	gtgt	gtg	ettta	ag	cgtgo	ggctga	1170
																	atgagg	1230
									_	_				-	_	_	gcttgg	1290
																	ttggct	1350
		-, -	-			-				_	_			-	_		tgtttg	1410
		_	-					-	-		_			-	_		gtggag	1470
				-			-		_		_	-				_	tccacg	1530
		_			_	_						_			-		_	1590
																	gttctg	1650
				-		_	-			_	_	-	-	_			tctgtg	1710
																	gagggg	
																	cttgcc	1770
			-		-		_			_		_	-	-		-	ctcagt	1830
		-						-		_						_	ggaagg	1890
		-		-			-		_					-			tctcac	1950
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					_		_			_				_	-		gtaact	2070
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																	agacaa	2190
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	189	gcga	actgo	cga a	acact	tgaad	ct ct	tacgo	ccact	. cca	acaaa	atga	tgti	tttca	agg '	tgtca	atggac	2310
	191	tgtt	tgcca	acc a	atgta	attca	at co	cagag	gttct	: taa	agtt	taa	agti	tgcad	cat o	gatte	gtataa	2370
	1.93	gcat	tgctt	tc 1	tttga	agtti	t aa	aatta	atqta	ı taa	acat	aag	ttg	catti	ag a	aaato	caagca	2430
	195	taaa	atcad	ctt (	caact	tgcta	aa aa	aaaaa	aaaaa	aaa	aaaa	aaaa	aaaa	aaaa	aa			2479
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					H: 35													
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					NCE:		. Ju	111	-									
							Δla	ጥb r	Leu	T.eu	Cve	T.011	ום. Т.	T.e.u	Δla	Δla	Δla	
	206		GIII	лту	ьeu	5 5	та	TIIT	Leu	neu	10	ii-cu	cu	пец	пти	15	1114	
			Dro	mb∽	<b>λ1</b> -5	-	λ1 ¬	D*^	Ala	Dro		λ 1 -	Thr	Sor	λls		Val	
		val	510	TIII		P10	HIG	PIO	HId		T IIT.	нта	THE	Set	30	FIO	Val	
	209				20					25					20			

0/11/00

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Output Set: N:\CRF4\09112002\J051618A.raw

011	<b>.</b>		<b>01</b>	D	. 1 -	<b>.</b>	<b>a</b>	m	D	a1 -	<b>a</b> 1	<b>61</b>	77.	m 1	<b>T</b>	<b>3</b>
	Lys	Pro		Pro	Ala	Leu	Ser	_	Pro	GIn	GIU	GIU		Thr	Leu	Asn
212	a1	11 a.h.	35	3	a1	17.0 1	<b>a</b> 1	40	T a	Mak	<b>61.</b>	7 00	45	<b>01</b> =	77.5 ~	T
	GIU	Met	Pne	Arg	GIU	val	55	GIU	ьeu	Met	GIU	60	THE	GIII	HIS	гàг
215	Т ол	50	002	7 l n	17 n 1	C1.,		Wot	Clu	<b>3</b> 1 5	C1.1		ת 1 ת	712	. ז .	T
		Arg	ser	АІа	Val	70	GIU	Met	GIU	нта	75	GIU	нта	нта	нта	ьуs 80
218		000	Com	C1	171		т о	א ז ה	N an	T 0.12		Dro	Com	m	II o	- •
	АІа	Ser	ser	GIU	85	ASII	ьец	Ald	ASII	90	PIO	PIO	ser	тут	95	ASII
221	Clu	Thr	λcn	Thr		Thr	Lvc	Val	C117		λen	Thr	Tla	Uic	-	uic
223	GIU	TIII	ASII	100	ASP	1111	гуз	vaı	105	ASII	MSII	1111	TIE	110	vai	птэ
	Δrα	Glu	Tla		Lare	Tla	Thr	Δen		Gln	Thr	Glv	Gln		Val	Dho
227	my	OIG	115	III	цу	110	1111	120	11011	0111	1	011	125		· u I	1110
	Ser	Glu		Va 1	Tle	Thr	Ser		Glv	Asp	Glu	Glu		Arσ	Ara	Ser
230	001	130		,			135		011		0_0	140	011	9	9	001
	His	Glu	Cvs	Ile	Ile	Asp		Asp	Cvs	Glv	Pro		Met	Tvr	Cvs	Gln
	145		-1-			150			- 1	1	155			- 4	4	160
		Ala	Ser	Phe	Gln	Tyr	Thr	Cys	Gln	Pro	Cys	Arq	Gly	Gln	Arq	Met
236					165	•		-		170	-		-		175	
238	Leu	Cys	Thr	Arg	Asp	Ser	Glu	Cys	Cys	Gly	Asp	Gln	Leu	Cys	Val	Trp
239		_	•	180	_				185	_				190		_
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242			195					200					205			
244	Asp	Asn	Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg
245		210					215					220				
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	225					230					235					240
	Cys	His	Asp	Pro		Ser	Arg	Leu	Leu		Leu	Ile	Thr	$\mathtt{Trp}$		Leu
251		_			245	_				250	_		_	_ •	255	_0
	Glu	Pro	Asp	_	Ala	Leu	Asp	Arg	_	Pro	Cys	Ala	Ser		Leu	Leu
254		<b>a</b> 1		260		***		<b>.</b>	265	<b></b>	*** 1			270	m1	D)
	Cys	Gln		HIS	ser	HIS	ser		vaı	Tyr	vaı	Cys	_	Pro	Thr	Pne
257	17 n 1	C1	275	7	7 ~ ~	C1 5	7 an	280	C1.,	т1 о	Tou	Ton	285	7 ~~	C1	wa 1
260	Val	Gly 290	ser	Arg	ASP	GIII	295	СТУ	GIU	TIE	Leu	300	PIO	Arg	GIU	vaı
	Dro	Asp	Glu	Фил	Glu	Val		Sar	Dho	Mot	Glu		Va 1	λνα	Gln	Glu
	305	кор	GIU	ıyı	GIU	310	GLY	SEI	rne	Mec	315	GIU	Vai	пту	GIII	320
		Glu	Asp	T.eu	Glu		Ser	Len	Thr	Glu		Met	Δla	Leu	Glv	
266	БСС	Olu	1125	пси	325	1119	DCI	LCu		330	0	1100	1114	пси	335	Olu
	Pro	Ala	Ala	Ala		Ala	Ala	Leu	Leu		Glv	Glu	Glu	Tle	000	
269	1 1 0			340					345	011	01	014	0_0	350		
	<210	)> SI	eo II		: 3											
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276	6 <400> SEQUENCE: 3															
278	Asp	Gln	Asp	Gly	${\tt Glu}$	Ile	Leu	Leu	${\tt Pro}$	Arg						
279					5					10						
		)> SE														
282	<211	L> LE	ENGTE	I: 10	)											

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Output Set: N:\CRF4\09112002\J051618A.raw

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- 284 <213> ORGANISM: Homo sapiens
- W--> 285 <220> FEATURE:
  - 286 <221> NAME/KEY: MOD_RES
  - 287 <222> LOCATION: (3)..(3)
  - 288 <223> OTHER INFORMATION: ASN residue is glycosylated
  - 290 <400> SEQUENCE: 4
  - 292 Val Gly Asn Asn Thr Ile His Val His Arg
  - 293 1 5 10
  - 296 <210> SEQ ID NO: 5
  - 297 <211> LENGTH: 11
  - 298 <212> TYPE: PRT
  - 299 <213> ORGANISM: Homo sapiens
- W--> 300 <220> FEATURE:
  - 301 <221> NAME/KEY: MOD_RES
  - 302 <222> LOCATION: (3)..(3)
  - 303 <223> OTHER INFORMATION: ASN residue is glycosylated
  - 305 <400> SEQUENCE: 5

L EST HOLOGICA O SUSSIE TO ELSO ES

- 307 Gly Ser Asn Gly Thr Ile Cys Asp Asn Gln Arg
- 308 1 5 10

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/051,618A

DATE: 09/11/2002 TIME: 10:31:47

Input Set : A:\seq listing.txt

Output Set: N:\CRF4\09112002\J051618A.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the  $\langle 220 \rangle$  to  $\langle 223 \rangle$  fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1146

## Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 9

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VERIFICATION SUMMARY

DATE: 09/11/2002

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L:49 M:283 W: Missing Blank Line separator, <220> field identifier L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1110 L:285 M:283 W: Missing Blank Line separator, <220> field identifier L:300 M:283 W: Missing Blank Line separator, <220> field identifier